

**S3 Table. Results of the non-metric and linear metric comparisons.**

	<i>H. habilis</i>	<i>H. erg.</i>	Dmanisi	eJ <i>H. erectus</i> (Lower, Upper) <sup>c</sup>	MP East Asia	<i>H. sapiens</i>	<i>H. floresiensis</i> (status) <sup>d</sup>	
<b>Non-metric comparisons of individual teeth</b> (frequency and ratio) <sup>a</sup>								
1	C <sub>1</sub> distal shoulder low (vs. high)	1/1	–	–	2/2**	1/1	*3/109 3%	1/1 (EP-MP)
2	P <sup>3</sup> transverse crest present	5/11** 45%	1/5 20%	0/1	3/9** (2/5, 1/4) 33%	1/8 13%	**6/283 2%	1/1 (EP)
3	P <sup>4</sup> transverse crest present	3/10** 30%	2/3**	1/2*	4/8** (1/4, 3/4) 50%	1/8 13%	**5/279 2%	1/1 (EP)
4	P <sup>3</sup> buccal groove(s) present	12/12** 100%	**1/5 20%	0/1	6/9 (4/5, 2/4) 67%	**2/6 33%	**139/245 57%	0/1 (post-Hh)
5	P <sup>4</sup> buccal groove(s) present	6/10 60%	3/3* 100%	0/2	1/8 (0/4, 1/4) 12%	3/6 50%	67/217 31%	0/1 (?)
6	P <sup>4</sup> lingual crown MD extensive	8/8** 100%	1/2	2/2*	4/4** (2/2, 2/2) 100%	*2/6 33%	**33/198 17%	1/1 (EP)
7	P <sub>3</sub> lingual cusp posi. mesially (vs. distally)	9/9 100%	*3/6 50%	1/2	3/3 (2/2, 1/1)	8/9 89%	163/197 83%	0/3 (post-Hh)
8	P <sub>4</sub> lingual cusp posi. mesially (vs. centrally or distally)	8/8 100%	4/5 80%	2/2	6/6 (4/4, 2/2) 100%	4/5 80%	155/211 73%	1/1 (?)
9	P <sub>3</sub> mesiolingual crown beveled and wrinkled	0/9 0%	0/6 0%	0/2	0/4 (0/3, 0/1) 0%	0/9 0%	0/214 0%	3/3 (unique)
10	P <sub>3</sub> transverse crest present	9/9 100%	5/5 100%	2/2	4/4 (3/3, 1/1) 100%	7/8 88%	176/215 82%	3/3 (?)
11	P <sub>4</sub> transverse crest present	0/7 0%	*5/7** 71%	0/2	*4/6* (3/4, 1/2) 67%	**5/6** 83%	40/220 18%	2/2 (post-Hh)
12	P <sub>3</sub> buccal groove(s) present	7/8** 87%	3/4 75%	0/2	2/3 (2/2, 0/1)	6/9 67%	**57/170 34%	0/3 (?)
13	P <sub>4</sub> buccal groove(s) present	4/6 67%	4/5* 80%	0/2	4/5* (2/3, 2/2) 80%	6/7** 86%	51/164 31%	0/1 (?)
14	P <sub>3</sub> buccal basal enamel thickened	1/6* 17%	0/5 0%	1/3?*	1/3* (1/3, –)	1/7* 14%	*0/207 0%	1/3 (EP-MP)
15	P <sub>3</sub> root bifurcated (vs. fused or single)	4/13** 31%	2/5* 40%	1/1	3/6** (3/6, –) 50%	0/7 0%	**26/599 <sup>e</sup> 4%	2/3 (EP)
16	P <sub>4</sub> root bifurcated (vs. fused or single)	5/10** 50%	4/7** 57%	–	4/7** (4/6, 0/1) 57%	0/4 0%	**15/570 <sup>e</sup> 3%	0/3 (?)
17	M <sub>1</sub> four-cusped (vs. five-cusped)	0/13 0%	0/10 0%	0/2	0/9 (0/7, 0/2) 0%	0/14 0%	9/268 3%	2/2 (Hs)
18	M <sub>2</sub> four-cusped (vs. five-cusped)	0/9** 0%	0/8** 0%	0/2	0/15** (0/12, 0/3 <sup>f</sup> ) 0%	0/12** 0%	**163/279 58%	2/2 (Hs)
19	M <sub>1</sub> mid-trigonid crest present	0/7 0%	1/9 11%	2/2	4/9** (3/6, 1/3) 44%	1/9 11%	7/176 4%	1/1
20	M <sub>2</sub> mid-trigonid crest present	1/7 14%	2/7 29%	1/2	1/13 (1/10, 0/3) 8%	0/11 0%	6/265 2%	1/1
<b>Metric comparisons of dentition as a whole</b> (minimum / maximum, and sample size in the lower rows) <sup>b</sup>								
21	Relative P <sub>3</sub> size (%)	24 / 26 N = 5	26 / 28 N = 3	26 / 27 N = 2	(26, –) N = 1, –	26 / 28 N = 3	22 / 27 N = 188	30 (unique) N = 2
22	Molar size % increase: M <sub>1</sub> →M <sub>2</sub>	+5 / +20 N = 7	–2 / +11 N = 6	–2 / +8 N = 3	(+4 / +9, +4 / +7) N = 3, 2	–2 / +4 N = 6	–15 / +5 N = 250	0 / +1 (post-Hh) N = 2
	Molar size % increase: M <sub>2</sub> →M <sub>3</sub>	–9 / +7 N = 6	–10 / –2 N = 3	–8 / +8 N = 2	(–10 / 0, –9) N = 4, 1	–14 / 0 N = 5	–15 / +14 N = 211	–9 / –6 (?) N = 2
23	Alv. arcade index (Lth/Bth, %)	117 / 156 N = 5	98 N = 1	123 N = 2	(107 / 108, –) N = 2, –	88 N = 1	–	103 / 105 (eJHe) N = 2

<sup>a</sup>Observed frequencies and percent ratios (for those samples with  $N \geq 4$ ) as well as the results of the Fisher's exact tests for the non-metric comparisons (nos. 1–20). The asterisk(s) to the right of each frequency indicates significant difference from the *H. sapiens* sample, and that on the left significant differences from the *H. habilis* sample (\*:  $P < 0.05$ , \*\*:  $P < 0.01$ ).

<sup>b</sup>The minimum and maximum values, and sample sizes (in the lower rows) are shown for the metric comparisons (nos. 21–23).

<sup>c</sup>Frequencies for the Sangiran Lower and Upper subsamples in the parentheses.

<sup>d</sup>Morphological status of *H. floresiensis* in the parentheses: 'EP', a primitive condition shared with the Afro-Asian Early Pleistocene *Homo*; 'EP-MP', a primitive condition shared with the Afro-Asian Early Pleistocene *Homo* and the East Asian Middle-Late Pleistocene archaic *Homo*; 'post-Hh', a condition derived from *H. habilis*; 'Hs', a derived condition shared with *H. sapiens*; 'eJHe', a condition most similar to early Javanese *H. erectus*; 'unique', a unique condition restricted to *H. floresiensis*.

<sup>e</sup>Sample studied by Shields [1].

<sup>f</sup>Zanolli [2] recently suggested the presence of 4-cusped  $M_2$ s in this group.

## References

1. Shields ED. Mandibular premolar and second molar root morphological variation in modern humans: What root number can tell us about tooth morphogenesis. *Am J Phys Anthropol.* 2005; 128: 299-311.
2. Zanolli C. Additional evidence for morpho-dimensional tooth crown variation in a New Indonesian *H. erectus* sample from the Sangiran Dome (Central Java). *PLoS ONE.* 2013; 8: e67233.